

Notice of Allowability

Application No.

10/677,587

Examiner

Sang Nguyen

Applicant(s)

LO, WILLIAM K.

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2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 11/14/05.
2. ☒ The allowed claim(s) is/are 1-48.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. ☐ Notice of References Cited (PTO-892) | 5. ☐ Notice of Informal Patent Application (PTO-152) |
| 2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. ☐ Examiner's Amendment/Comment |
| 4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. ☒ Examiner's Statement of Reasons for Allowance |
| | 9. ☐ Other _____ |

DETAILED ACTION

Response to Amendment

Applicant's response to amendment filed on 11/14/05 has been entered. It is noted that the application contains claims 1-48 with amendment on 11/14/05.

Allowable Subject Matter

Claims 1-48 are allowed.

The following is an examiner's statement of reasons for allowance:

As to independent claims 1 and 45 are allowable over the prior art for at least the reason that the prior art of record, taken alone or in combination, fails discloses or render obvious a scanned optical system and method for use in optical probing applications comprising all the specific elements with the specific combination including of said optical column being mounted on an xyz stage configured to scan the optical column across the DUT in the xy plane, said xy plane being parallel to said sample surface and z being pemendicular to said sample surface; a control system operable to move the xyz stage so as to scan the optical column across the DUT, and said control system providing said xyz stage with a sufficiently large x-y scan range to provide said focusing optics with a field of view (FOV) of at least 100 x 100 microns for diffraction limited numerical aperture (NA) as high as 3.0 in combination with the rest of the limitation of claims 1 and 45.

As to independent claim 37 is allowable over the prior art for at least the reason that the prior art of record, taken alone or in combination, fails discloses or render obvious a hybrid scanning lens optical system comprising all the specific elements with

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the specific combination including of means for scanning said focusing optics across the DUT in a scan region, said focusing optics being scanned in the xy plane, said xy plane being parallel to said sample surface and z being perpendicular to said sample surface, wherein said scanning of said focusing optics providing high resolution imaging within said scan region; and means for providing low resolution imaging across a large area of said DUT, wherein focusing optics forming an optical column with an optical axis in combination with the rest of the limitation of claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sang Nguyen whose telephone number is (571) 272-2425. The examiner can normally be reached on 9:30 am to 7:00 pm.

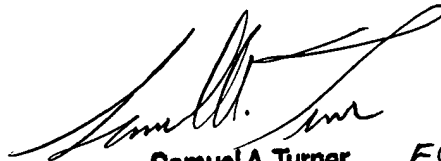
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on (571) 272-2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GN

Sang Nguyen
Art Unit 2877
November 20, 2005



Samuel A. Turner
Primary Examiner

FOR

Gregory J. Toatley, Jr.
Supervisory Patent Examiner
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